

## **REMARKS**

The Office Action dated December 29, 2005, has been received and carefully noted. The following remarks are submitted as a full and complete response thereto. Claims 1-6 are pending and respectfully submitted for consideration.

### **Finality of Office Action**

As a preliminary matter, the Applicants respectfully submit that the finality of the current Office Action is improper. Under U.S. patent practice, MPEP § 706.07(a), a second or any subsequent action on the merits shall be final, except where the Examiner introduces a new ground of rejection that is neither necessitated by Applicants' amendment of the claims nor based on information submitted in an Information Disclosure Statement filed during the period set forth in 37 C.F.R. § 1.97(c). In this case, the Office Action falls under the exception because the Examiner introduced a new ground of rejection citing the Hori et al. reference (U.S. Patent No. 5,594,455, "Hori"), which was not previously of record, and the Applicants did not amend the claims. In this regard, the Applicants note that page 4, paragraph 2 of the Office Action incorrectly stated that the Applicants amended the claims. Therefore, in view of the above, the Office Action should not have been made final. Accordingly, the Applicants respectfully request withdrawal of the finality of the Office Action.

### **Rejection under 35 U.S.C. § 102**

Claims 1, 2, 5 and 6 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hori. Claims 2 and 5 depend from claim 1. The Applicants traverse the rejection and respectfully submit that claims 1, 2, 5 and 6 recite subject matter that is neither disclosed nor suggested by Hori.

As a result of the claimed invention, the conductive member is provided to improve average sensitivity. A distance between the outer edge of the grounding conductor and the conductive member is set at a predetermined value of L. In the event that the predetermined length L is set to a value, which is half the wavelength  $\lambda$ , it is recognized that a large average sensitivity can be secured at a relatively higher elevation angle than the average sensitivity dB resulting when the linear conductor or conductive members are omitted. Further, in the event that the predetermined length L is set to one-fourth the wavelength  $\lambda$ , it is recognized that the large average sensitivity is obtained at a relatively lower elevation angle than that resulting when the linear conductors or conductive members are omitted.

In contrast, the conductors 64, 66 of Hori constitute a balanced feed line (i.e., power supply). See column 8, line 67 of Hori.

The Applicants respectfully submit that, as Hori does not disclose or suggest the claimed features of the invention, Hori cannot achieve the advantages of the present invention.

Hori discloses a bi-directional printed antenna, including a dielectric substrate having first and second surfaces that are substantially in parallel, at least one pair of radiation element conductors having the same shape and the same size, each pair of which is arranged on the first and second surfaces at positions opposing each other, respectively, a feeding circuit coupled to at least one edge of each of the radiation element conductors, and a ground conductor arranged on the second surface.

With respect to claims 1 and 6, the Applicants respectfully submit that Hori fails to disclose or suggest the claimed features of the invention. Claim 1 recites, in part, a

conductive member provided on the dielectric substrate at a position spaced away outwardly from an outer edge portion of the grounding conductor. The Office Action took the position that the strip conductor 36 is comparable to the conductive member recited in claim 1. See page 2 line 14 of the Office Action. In contrast, Hori discloses that strip conductor 36 is provided at a position inward from an outer edge portion of the ground conductor (see Figs. 3A, 3C and 5 of Hori), and the strip conductor 36 in Hori is connected to the ground conductor 37 and the radiation element conductor 32.

As such, Hori does not disclose or suggest at least the combination of features of a conductive member provided on the dielectric substrate at a position spaced away outwardly from an outer edge portion of the grounding conductor as recited in claim 1.

Claim 6 recites, in part, a pair of conductive members provided on the dielectric substrate at a position spaced away outwardly from an outer edge portion of the grounding conductor so as to oppose each other, and that the radiation element, the grounding conductor, and the pair of conductive members are provided on the same surface of dielectric substrate.

The Office Action also took the position that the strip conductors 64 and 66 in Hori were comparable to the pair of conductive members recited in claim 6. However, the Applicants respectfully submit that, as shown in Figs. 6A and 6B of Hori, the strip conductors 64 and 66 are not provided on the dielectric substrate 63 at a position spaced away outwardly from the outer edge portion of the ground conductor 67. The strip conductor 64 is provided on a different surface of the dielectric substrate 63 and the strip conductors 64, 66 are connected to the ground conductor 67 and the radiation element 62.

As such, Hori does not disclose or suggest at least the combination of features of a pair of conductive members provided on the dielectric substrate at a position spaced away outwardly from an outer edge portion of the grounding conductor, and the radiation element, the grounding conductor, and the pair of conductive members being provided on the same surface of the dielectric substrate, as recited in claim 6.

**Rejection under 35 U.S.C. § 103**

Claims 3 and 4 were rejected 35 U.S.C. § 103(a) as being unpatentable over Hori. Claims 3 and 4 depend on claim 1. The Applicants traverse the rejection and respectfully submit that as claims 3 and 4 depend from claim 1 and include the patentable aspects thereof, claims 3 and 4 are allowable for at least the same reasons. Thus, the Applicants respectfully submit that the Office Action has failed to establish a *prima facie* case of obviousness for purposes of the rejection of claims 3 and 4 under 35 U.S.C. § 103 for at least this reason.

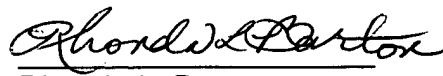
**Conclusion**

Claims 2-5 depend from claim 1. The Applicants respectfully submit that these dependent claims are allowable at least because of their dependency from allowable base claim 1. Accordingly, the Applicants respectfully request allowance of claims 1-6 and the prompt issuance of a Notice of Allowability.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing Attorney Dkt. No. 107355-00100.**

Respectfully submitted,



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